

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
17 July 2003 (17.07.2003)

PCT

(10) International Publication Number  
**WO 03/058590 A1**

(51) International Patent Classification<sup>7</sup>: **G09G 3/28**

Intellectual Property & Standards GmbH, Weisshausstr. 2,  
52066 Aachen (DE).

(21) International Application Number: **PCT/IB02/05574**

(74) Agent: **VOLMER, Georg**; Philips Intellectual Property &  
Standards GmbH, Weisshausstr. 2, 52066 Aachen (DE).

(22) International Filing Date:  
18 December 2002 (18.12.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
102 00 828.0 11 January 2002 (11.01.2002) DE

(71) Applicant (for DE only): **PHILIPS INTELLECTUAL  
PROPERTY & STANDARDS GMBH** [DE/DE]; Stein-  
damm 94, 20099 Hamburg (DE).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE,  
SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK,  
TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except DE, US):  
**KONINKLIJKE PHILIPS ELECTRONICS N.V.**  
[NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven  
(NL).

(72) Inventors; and

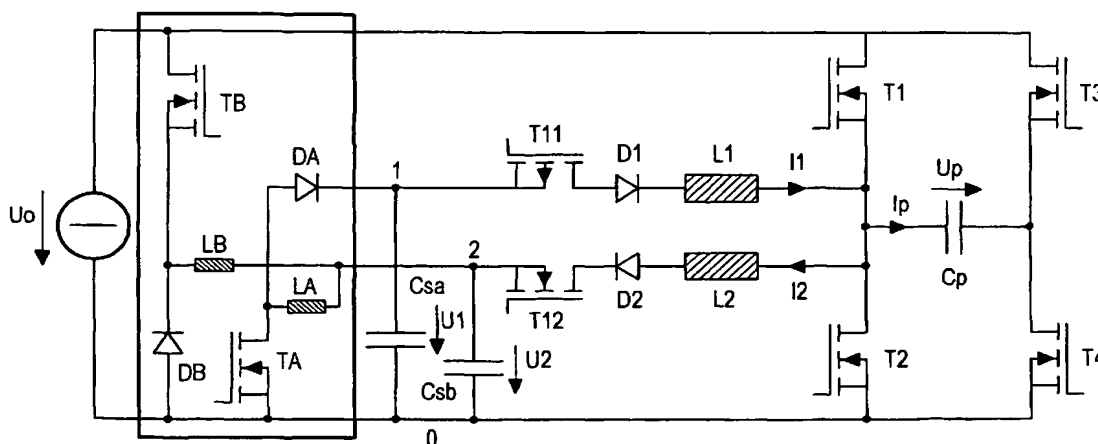
(75) Inventors/Applicants (for US only): **VAN DER  
BROECK, Heinz** [DE/DE]; c/o Philips Intellectual  
Property & Standards GmbH, Weisshausstr. 2, 52066  
Aachen (DE). **WENDT, Matthias** [DE/DE]; c/o Philips

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: **CIRCUIT ARRANGEMENT FOR THE AC POWER SUPPLY OF A PLASMA DISPLAY PANEL**



(57) Abstract: A circuit arrangement for commutating the AC voltage of a plasma display panel, in which the losses and electro-magnetic interference which occur as a result of the influence of parasitic resistances (coils, supply lines, semiconductor switches) and the attendant hard charging and discharging processes, are substantially avoided. For the charging operation of the capacitor (Cp) of the plasma cells the oscillation circuit is supplied with an auxiliary charging voltage (u1) whose value exceeds 50% of the input voltage (U0). The oscillation circuit for the discharging operation is supplied with an auxiliary discharging voltage (u2) whose value falls short of 50% of the input voltage (U0). The two auxiliary voltages are connected to a DC converter.